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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,823	07/17/2003	Johannis Josephus Den Boer	TS 6377 (US)	1272
23632	7590	12/11/2006	EXAMINER	
SHELL OIL COMPANY			SHAW, CLIFFORD C	
P O BOX 2463			ART UNIT	
HOUSTON, TX 772522463			PAPER NUMBER	

1725

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/621,823

Applicant(s)

DEN BOER ET AL.

Examiner

Clifford C. Shaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 7/26/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1016, 1003.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

1.) The search reports associated with international application no.s PCT/EP03/07787, PCT/EP03/07790, and PCT/EP03/08060 are cited in the attached form PTO-892. Copies of these search reports were provided by applicant in a prior submission.

2.) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3.) Claims 1, 2, 4, 6, and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moe (4,736,084, cited by applicant) taken with Liady (1,260,690). Figure 1 and the discussion at columns 2-3 of the patent to Moe (4,736,084) discloses a method of joining tubulars wherein a reducing gas is flushed around the heated tubular ends and the ends of the tubulars are forged welded. The claims differ from Moe (4,736,084) in calling for tubular ends with a non-planar shape, and more specifically with sinusoidal or teathed shapes. This differences does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have provided the tubulars in Moe (4,736,084) with the end shapes claimed, the motivation being the teachings of Liady (1,260,690) that such are useful for welding tubulars in order to produce a stronger weld (see figures 1-4 in Liady (1,260,690)). In regard to claims 4, 10, and 11, these claims do not include any further method steps. Instead, claims 4, 10, and 11 are descriptive of post weld-method scenarios that do not impose any

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limitation on the claimed subject matter that would distinguish over the combination of prior art references.

4.) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moe (4,736,084) taken with Liady (1,260,690) as applied to claims 1, 2, 4, and 6 above, and further in view of Moyer (2,719,207, cited by applicant) and Rothschild (2,497,631). The only aspect of the claim to which the rejection above does not apply is the provision for a particular gas mixture. This difference does not patentably distinguish over the prior art. The patent to Rothschild (2,497,631) discloses welding shield gas compositions that fall within the constituent ranges claimed (see column 1, lines 39-55 of Rothschild (2,497,631)). At the time applicant's invention was made, it would have been obvious to have used the specific gas disclosed by Rothschild (2,497,631) in the welding method of Moe (4,736,084), the motivation being the teachings of Moyer (2,719,207) that it is advantageous to conduct forge welding with a gas comprised of an inert gas with a small amount of a reducing gas such as hydrogen (see column 3, lines 10-25 in Moyer (2,719,207)).

5.) Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moe (4,736,084) taken with Liady (1,260,690) as applied to claims 1, 2, 4, and 6 above, and further in view of Moe (5,721,413, cited by applicant). The only aspect of the claim to which the rejection above does not apply is the provision for the ferrite bars around or within the circumferences of the tubular ends. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have provided the arrangement of

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Moe (4,736,084) with the ferrite bars as claimed, the motivation being the teachings of Moe (5,721,413) that such is useful for welding tubulars (see elements 13 in figure 5 and the discussion at column 2, lines 55-65 in Moe (5,721,413)).

6.) Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moe (4,736,084) taken with Liady (1,260,690) as applied to claims 1, 2, 4, and 6 above, and further in view of Hitz (2,998,646). The only aspect of the claim to which the rejection above does not apply is the provision for the overlapping tubular ends. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have shaped the tubular ends in Moe (4,736,084) to be overlapping, the motivation being the teachings of Hitz (2,998,646) that this is useful when welding tubular ends together (see elements 3 and 4 in figures 1-3 of Hitz (2,998,646)).

7.) Applicant's arguments filed 10/3/2006 have been fully considered but they are not persuasive. The search reports cited by applicant have been made of record as discussed in paragraph 1 above. Applicant states "Claim 1 has been amended by the addition of "in a circumferential direction"...". Applicant is advised that no such amendment appears in amended claim 1 as filed on 10/3/2006. Applicant argues that the teachings of Moe are not compatible with the welding method of Liady. This argument is not persuasive. The purpose of the tubular end shape in Moe is to provide for a high strength joint in a drill stem or casing. Using the Moe approach with the welding method of Liady would have been obvious if the advantages of the

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Moe joint were desired. Clearly, if the Liady welding method were used with the Moe tubular ends, these ends would have to be shaped to maintain the gap used in the Liady method.

8.) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

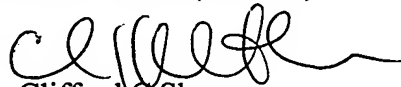
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Patrick J. Ryan, can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw
Primary Examiner
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December 8, 2006